Gleaner®

9250
DynaFlex Draper Header

SERVICE MANUAL
79034308 B Rev.

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01 - Safety

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NOTES

SAFETY

SAFETY ALERT SYMBOL

FIG. 1: The safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

Look for the safety alert symbol both in this manual and on safety signs on the machine. The safety alert symbol will direct your attention to information that involves your safety and the safety of others.

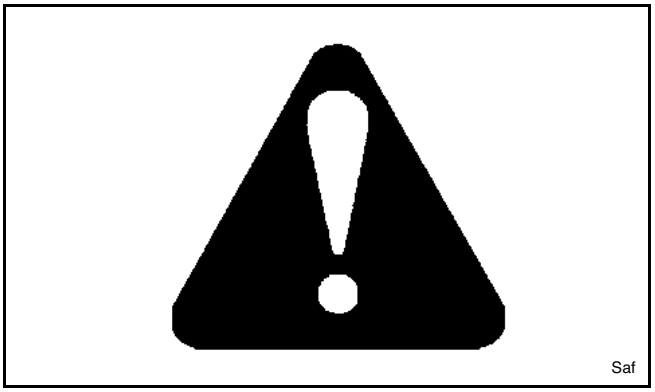

FIG. 1

SAFETY MESSAGES

FIG. 2: The words DANGER, WARNING or CAUTION are used with the safety alert symbol. Learn to recognize these safety alerts and follow the recommended precautions and safety practices.

FIG. 2

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in DEATH OR VERY SERIOUS INJURY.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in DEATH OR SERIOUS INJURY.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, may result in MINOR INJURY.

INFORMATIONAL MESSAGES

The words IMPORTANT and NOTE are not related to personal safety, but are used to give additional information and tips for operating or servicing this equipment.

IMPORTANT: Identifies special instructions or procedures that, if not strictly observed, could result in damage to or destruction of the machine, process, or its surroundings.

NOTE: Identifies points of particular interest for more efficient and convenient repair or operation.

SAFETY SIGNS

WARNING: Do not remove or obscure Danger, Warning or Caution signs. Replace any Danger, Warning or Caution signs that are not readable or are missing. Replacement signs are available from your dealer in the event of loss or damage. The actual location of the safety signs is illustrated in the Operators Manual.

If a used machine has been purchased, make sure all safety signs are in the correct location and can be read.

See Safety Sign Location of this section for illustrations.

Replace any safety signs that cannot be read or are missing. Replacement safety signs are available from AGCO parts.

A WORD TO THE OPERATOR

FIG. 3: Read and understand the Operator Manual and the manual for all attachments before operating the machine.

Learn how to operate the machine and how to use the controls properly.

Do not let anyone operate the machine without instruction and training.

For your personal safety and the personal safety of others, follow all safety precautions and instructions found in the manuals and on decals affixed to the machine and attachments.

CAUTION: See the combine Operator Manual for other important safety information.

Personal injury or death may result if these precautions are not followed.

WARNING: An operator must not use alcohol or drugs, which can affect their alertness or coordination. An operator taking prescription or over the counter drugs needs medical advice and whether or not they can properly operate machines.

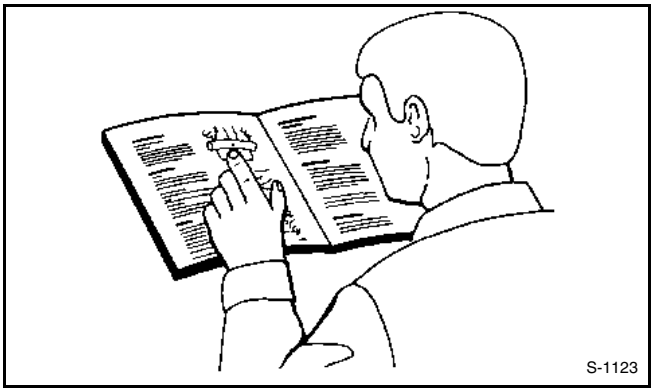

FIG. 3

IT IS TOO LATE TO REMEMBER WHAT SHOULD HAVE BEEN DONE AFTER THE ACCIDENT HAS HAPPENED.

- **READ** the Operator Manuals carefully to acquaint you with the header and the machine. Operating unfamiliar equipment can cause accidents.
- **ALWAYS** shift the transmission to neutral, stop the engine, set the brake and remove the start key before leaving the operators station, or before permitting anyone to inspect, clean, lubricate, adjust or repair any part of the machine or its attachments, unless otherwise specifically recommended in the Service Manual or the Operators Manual.
- **NEVER** permit anyone to work under the header or the feeder housing or between the header and the machine **UNLESS** the lift ram stop is fully engaged on the left lift ram, the engine is stopped, the brake is set, the key is removed from the start switch and the header is latched securely to the feeder housing.
- **NEVER** permit the operator or another person to engage or disengage the lift ram stop **UNLESS** the engine is stopped, the brake is set, and the key is removed from the start switch while that person is between the header and the machine or under the feeder housing.
- **NEVER** permit anyone to get under the reel **UNLESS BOTH THE RIGHT HAND and LEFT HAND** reel ram stops are fully engaged over the lift ram rods and against the ends of the lift ram barrels, the engine is stopped, the brake is set, and the start key is removed.
- **BE SURE** that everyone is clear of the machine before starting the engine and mechanism or its attachments.
- **ALWAYS** be sure that all shields, guards and access doors are in place when the header is in operation.
- **DO NOT** try to clean, adjust, or service the header while the header or the machine is running.
- **KEEP** all belts and chains in alignment and at the proper tension.
- **NEVER** turn the header conveyor or drives unless **ALL** parts of the body and articles of clothing are well clear of the sickle, chains, gears, and other moving parts.
- **FOR YOUR SAFETY** and the safety of others, all **SAFETY AND OPERATIONAL DECALS** that become damaged, faded, or come off should be replaced immediately.
- **REMEMBER** that safe operation is no accident.
- **ALWAYS** lower the Grain Head to the ground, or block, or lock the Grain Head up securely before disconnecting or servicing any part of the hydraulic system.
- **ALWAYS** keep the drives, moving parts, and shields clean of chaff and straw buildup to reduce the possibility of fire.
- **BEFORE** attaching, adjusting or working on the driveline, disengage the header drive, lower the header to the ground, stop the engine, remove the starter key and set the parking brake.
- **BEFORE** engaging the header drive, carefully engage and lower the header to check the clearance, driveline shaft slide range, and articulation.
- **BE SURE** that all drivelines have the correct guards and that they are in good operating condition.
- **NEVER** use the driveline as a step.
- **NEVER** wear loose fitting clothing and keep at least your height in distance away from a rotating driveline.

FIRE PREVENTION AND FIRST AID

FIG. 4: Be prepared for emergencies. Always carry one or more suitable fire extinguishers (ABC rating), dry chemical, 2.2 Kg (5 lb). Check fire extinguishers regularly to be sure the fire extinguishers are properly charged and in operating condition.

Mounting a fire extinguisher near the operator's cab and a fire extinguisher near the engine compartment is recommended.

To reduce the risk of fire, frequently remove accumulated crop material from the machine, engine deck, header and check for over heated components. Check the machine daily for any noises that are not normal. Such noises can indicate a failed bearing that can cause heat build up.

Keep a first aid kit handy for treatment of minor cuts and scratches.

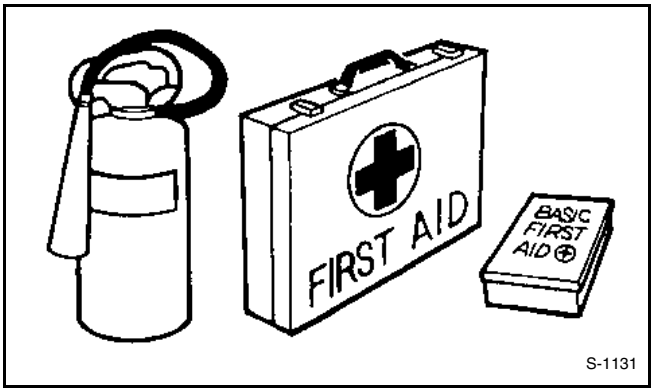

FIG. 4

FIG. 5: To reduce the risk of fire or damage if fire occurs:

- Make sure the engine compartment is free of chaff and crop debris
- Clean areas of the machine and header where crop can accumulate
- Mount a fire extinguisher with easy reach at the front and rear of the machine

If any flame cutting, welding, or arc welding is to be done on the machine or header make sure to clear any crop material or debris from around the area. Make sure the area below the work area is clean of any flammable material as falling molten metal or sparks can ignite the material.

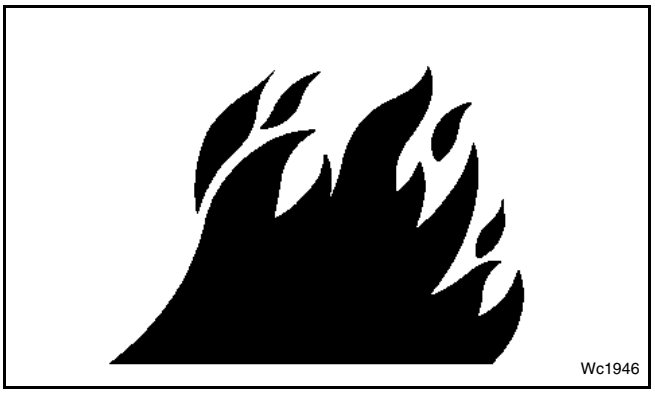

FIG. 5

PREPARE FOR OPERATION

Make sure the machine is in the proper operating condition as stated in the Operator Manual. Make sure the machine has the correct equipment needed by local regulations.

Read and understand all operating instructions and precautions in the manual and the Operator Manual before operating or servicing the machine. Make sure you know and understand the positions and operations of all controls.

Make certain that all controls are in neutral and the parking brake is engaged before starting the machine. Make certain that all people are well away from your area of work before starting and operating the machine.

All equipment has a limit. Make sure you understand the speed, brakes, steering, stability, and load characteristics of the machine before you start. Check all controls in an area clear of people and obstacles before starting your work.

Be aware of the machine size and have enough space available to allow for operation. Never operate the machine at high speed in crowded places.

ROAD AND HIGHWAY OPERATION

FIG. 6: COMPLY with your state and local **LAWS** and **REGULATIONS** governing highway safety when moving machinery on a highway.

- **ALWAYS** travel at a reasonable speed for road or field conditions. Whenever possible, avoid traveling near ditches, embankments and holes. Reduce speed when turning crossing slopes, and or rough, slick or muddy surfaces.
- **AVOID** transporting the machine on the road with grain in the tank. Extra caution and slower speeds need to be used if the machine must be transported with grain in the tank.
- **ALWAYS** reduce your speed **GRADUALLY** to maintain adequate weight for stability on the rear (steering) wheels whenever:

a. Slowing the **ENGINE** speed.

b. Slowing the **HYDRO-TRACTION** drive.

c. Applying the **BRAKES**.

- **BRAKES** must be locked together during road travel. **NEVER** apply individual wheel brakes for turning assist during road or highway operation.
- **TOWING** of the machine is NOT recommended. But if the machine must be towed, refer to the Operator Manual for proper towing procedures.
- **ROTATE** the header extremity lights. Use headlights, flashing warning lights, taillights and turn signals, day and night, unless prohibited by local law. Make sure lights, reflectors and SMV emblem are installed, in good condition and wiped clean.
- **CHECK** clearance **CAREFULLY** before driving the machine and header under electric lines, over bridges, or other obstructions along the highway.

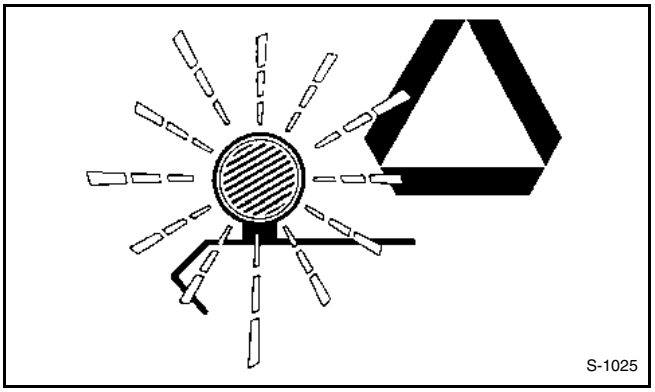

FIG. 6

FIG. 7: Watch for overhead wires and other obstructions. Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

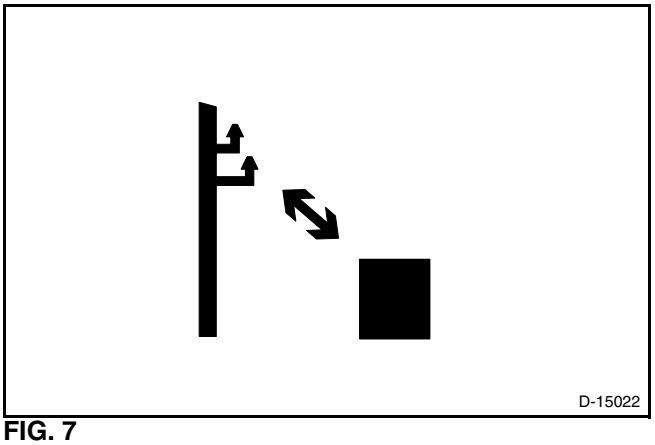

FIG. 7

HEADER TRANSPORT TIE-DOWN

FIG. 8: Hooking locations along the frame are provided on the header to allow for proper tie-down for transport.

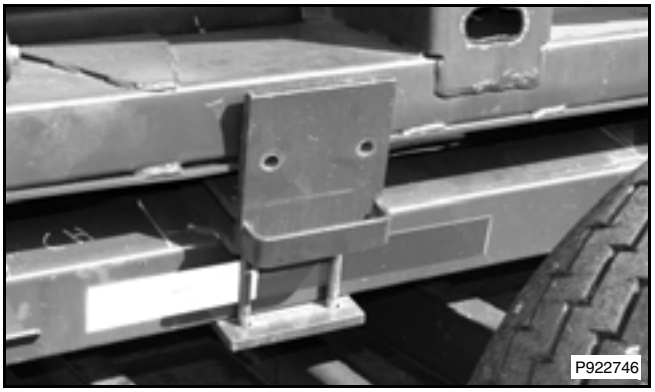

FIG. 8

FIG. 9: Example of tie-down location (1) on the trailer.

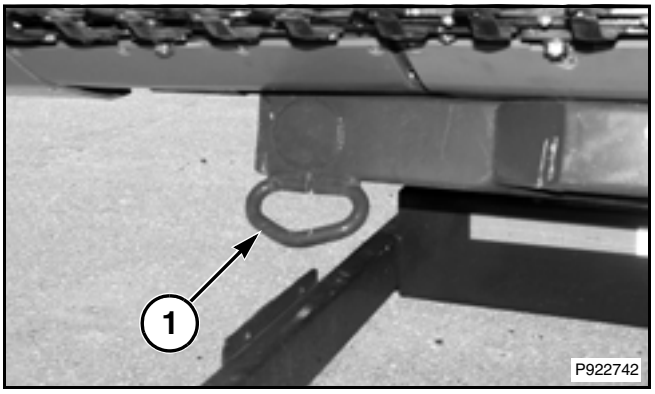

FIG. 9

FIG. 10: Example of tie-down location (1) on trailer.

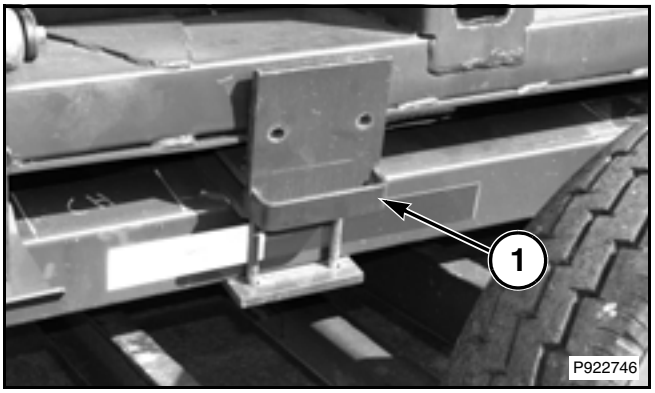

FIG. 10

OPERATION

WARNING: In order to provide a better view, certain photographs and illustration in this manual will show an assembly with the shield removed. Do not operate the machine and attachments unless all shields are in place. Replace shields immediately upon completion of inspection, repairs, cleaning or adjustment and before operation begins or resumes.

FIG. 11: Wear close fitting clothing and personal protection equipment appropriate for operating and or performing lubrication and maintenance. Tie up long hair to prevent hair from becoming entangled in moving parts.

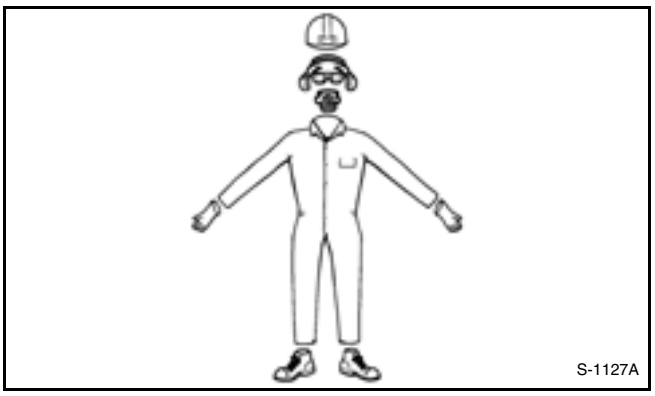

FIG. 11

FIG. 12: Face the ladder and use the handrails when getting on or off of the machine.

FIG. 12

FIG. 13: Never operate the engine in a closed building unless exhaust is vented outside.

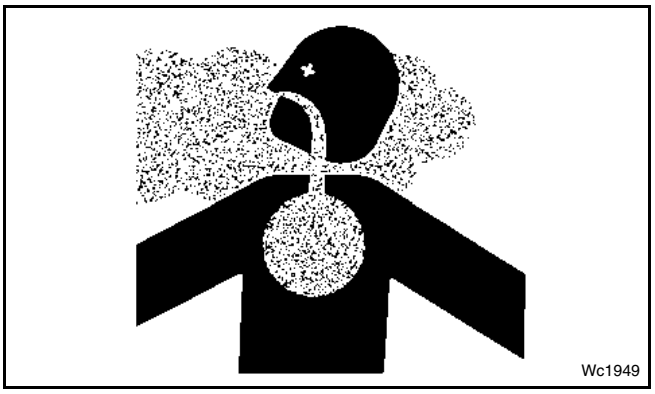

FIG. 13

FIG. 14: All shields and guards must be in the correct operating position and in good condition.

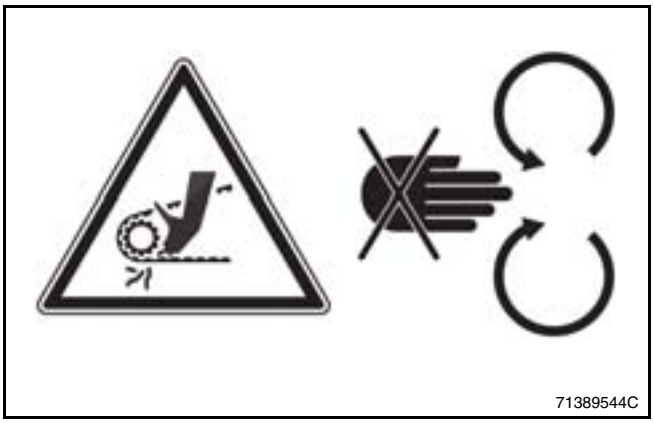

FIG. 14

FIG. 15: Never stand near the machine during operation. Debris can be thrown from the machine during operation possibly resulting in injury.

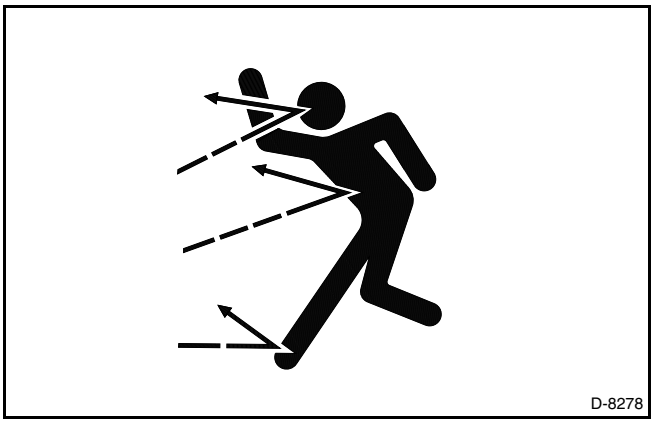

FIG. 15

FIG. 16: Always wear the seat belt when the machine is moving. If another person is riding in the instructor's seat, make sure the person wears a set belt. Seat belts must be worn fitted snugly around the hips and not twisted.

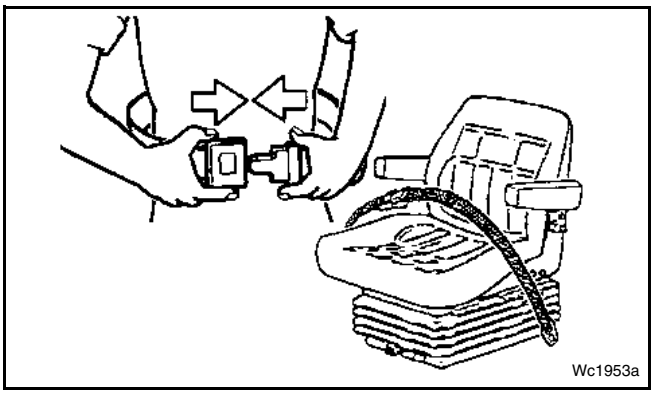

FIG. 16

FIG. 17: Never allow anyone on any part of the machine or attachments except in the operator's seat and the instructor's seat when the engine is running.

Do not attempt to get on or off of the machine while the machine is moving.

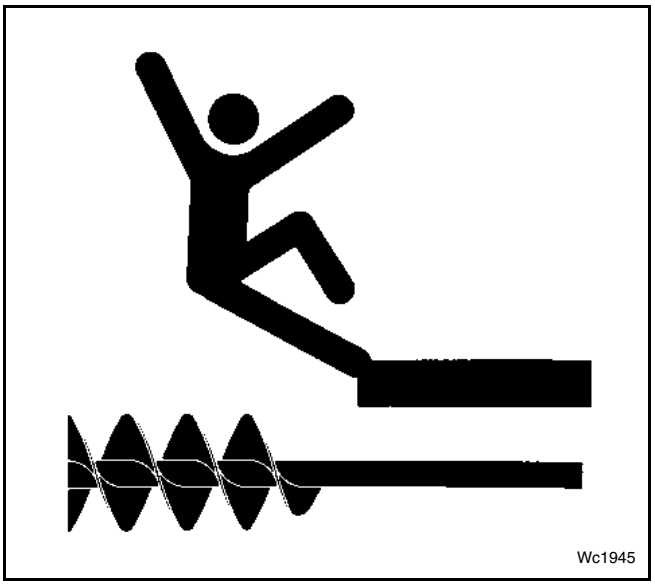

FIG. 17

FIG. 18: Avoid contact with electrical power lines. Always put the grain tank unloader tube in the transport position and lower the radio aerial before moving the machine near electrical wires. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

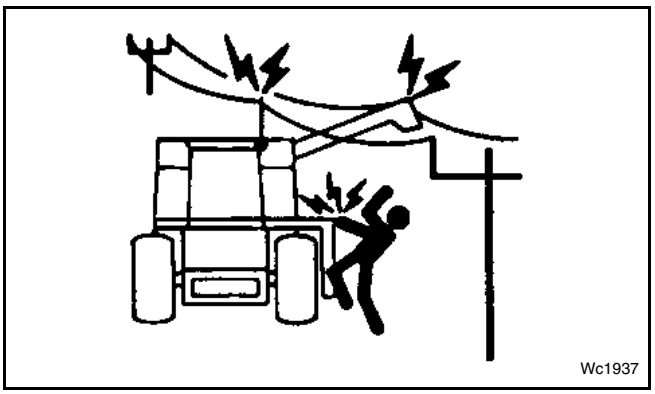

FIG. 18

FIG. 19: Do not operate the machine with the drive shaft shields open or removed. Entanglement in rotating drive shafts can cause serious injury or death. Stay clear of rotating components.

Make sure rotating guards turn freely.

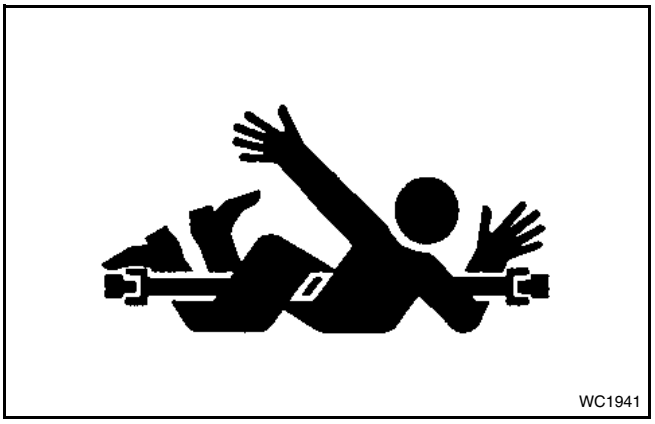

FIG. 19

FIG. 20: Use extra care and reduce speed when operating on hillsides or near ditches or embankments especially with a full grain tank to avoid rollover. Travel speed must be such that complete control and machine stability is maintained at all time. Shift to a lower gear before descending a steep hill.

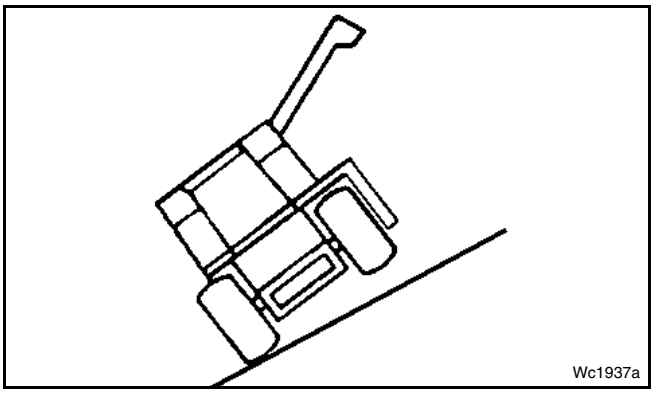

FIG. 20

FIG. 21: Always shut off the engine, shift the transmission to neutral, set the parking brake and remove the start key before leaving the operator's station or before permitting anyone to inspect, clean, lubricate, adjust or repair any part of the machine or attachments unless specifically instructed otherwise in this manual. Never leave the machine unattended while the engine is operating.

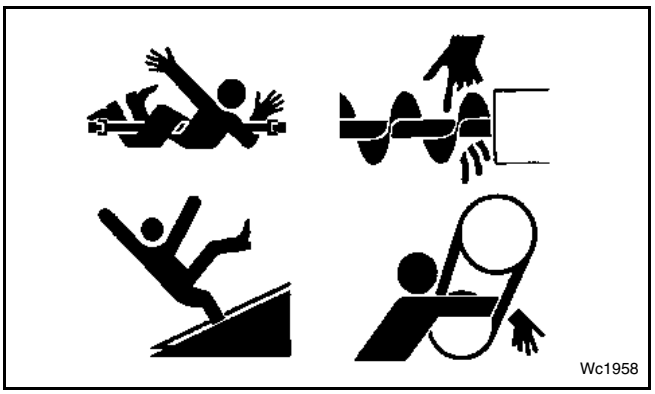

FIG. 21

FIG. 22: Never permit anyone to work under the header or the feeder house, unless the stop is properly engaged on the header lift cylinder, the engine is stopped, the parking brake is set, and the start key is removed from the start switch.

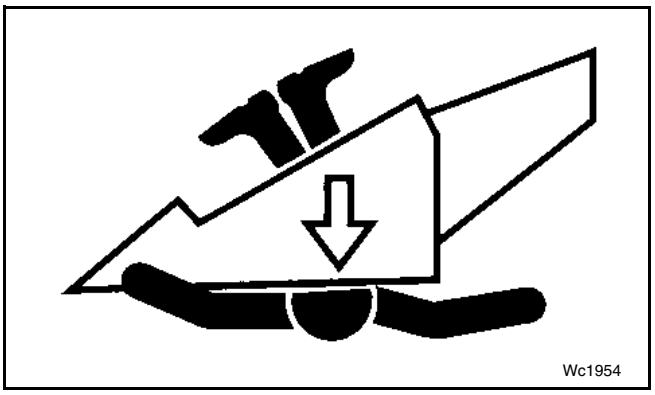

FIG. 22

FIG. 23: Always stop the engine before refueling. Do not smoke while refueling.

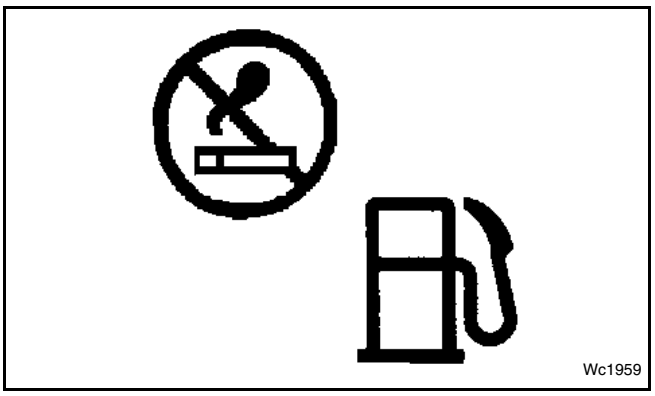

FIG. 23

MAINTENANCE

FIG. 24: Escaping fluid under high pressure can be almost invisible but penetrate the skin causing serious injury.

Consult a doctor immediately if you sustain an injury by escaping fluids. Fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

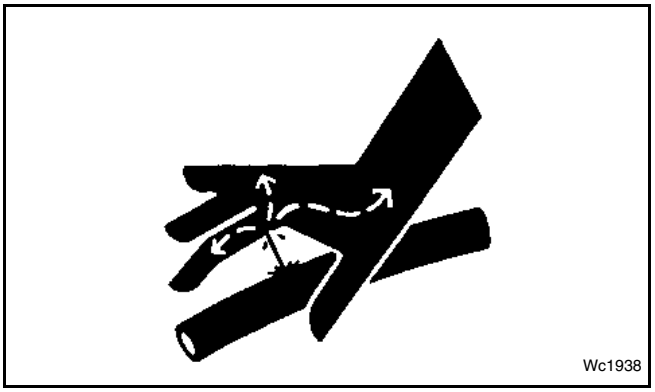

FIG. 24

FIG. 25: Use a piece of cardboard or wood to search for possible leaks, never use your hands.

Relieve pressure from the hydraulic and fuel injection systems by lowering raised equipment, shutting off accumulator valve and shutting off the engine before loosening any part of the systems. Tighten all connections before applying pressure.

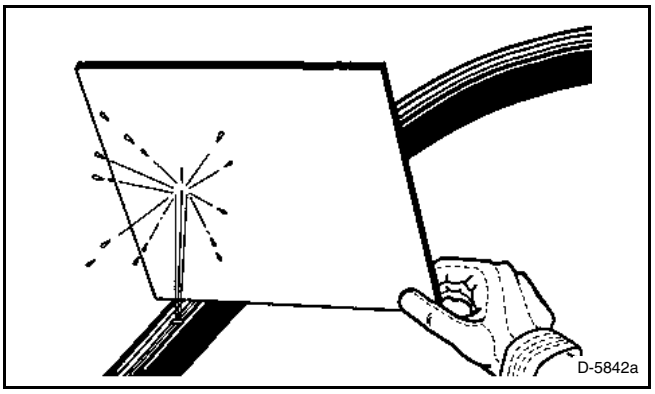

FIG. 25

FIG. 26: Be aware that the surfaces in and around the engine compartment will be hot if the engine has been running, even for a short time.

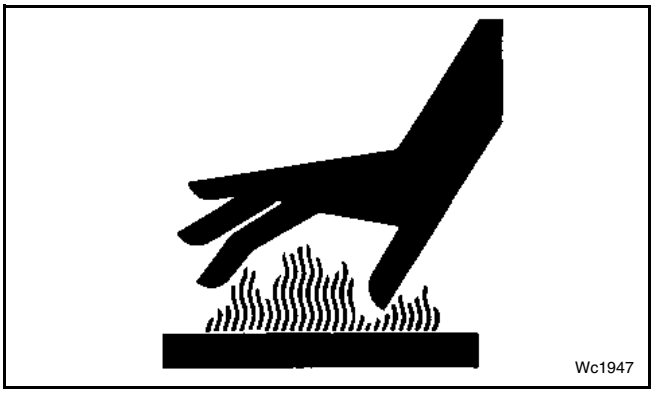

FIG. 26

FIG. 27: Do not remove radiator cap if engine is hot. Only remove cap when the cap is cool enough to touch with bare hands. Loosen cap slowly to first notch to relieve pressure, then remove cap.

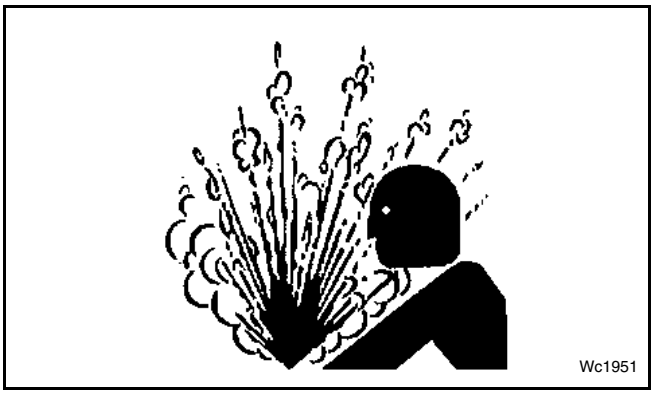

FIG. 27

FIG. 28: Remove spilled oil, antifreeze or fuel immediately from operator's ladder and platform and other access areas.

Keep all access areas clean and free of obstructions.

FIG. 28

FIG. 29: Before doing any unplugging, lubricating, servicing, cleaning, or adjusting, park the machine on a solid level surface. Always shut off the engine, shift the transmission to neutral, set the parking brake and remove the start key before leaving the operator's station.

LOOK AND LISTEN! Make sure all moving parts have stopped.

Always chock the wheels before working on or under the machine or attachments.

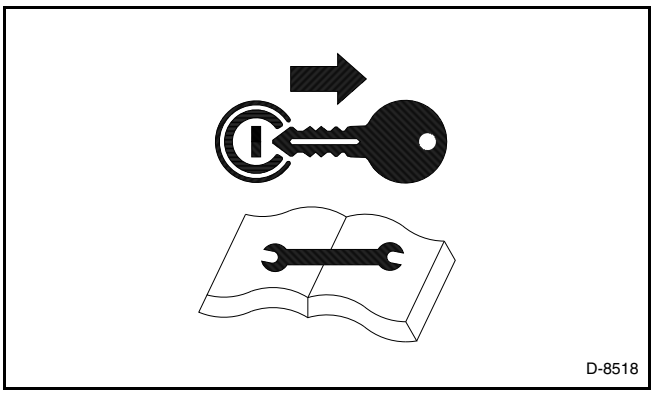

FIG. 29

FIG. 30: When working on the machine make sure the header is lowered to the ground and the reel is lowered all the way.

When it is necessary for the header or the reel to be in the raised position, raise the header and the reel all the way. Engage the header and the reel lift cylinder stops. See Cylinder Stops of this section for more information.

WARNING: Always install the header and the reel lift cylinder stops when working near the header. Do not rely on the hydraulic system to keep the header and the reel raised. A sudden loss of hydraulic pressure could cause the header or the reel to lower unexpectedly.

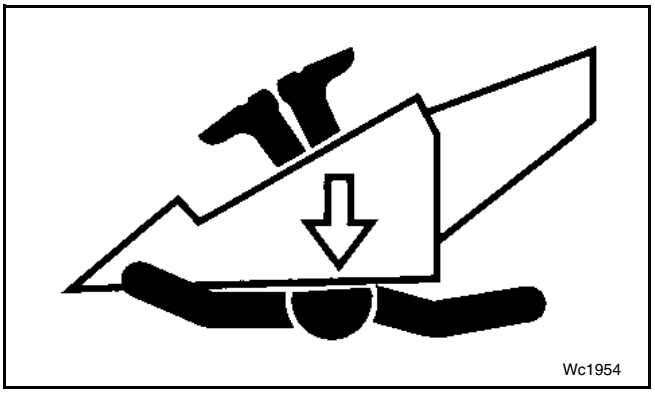

FIG. 30

FIG. 31: Never check, adjust, or lubricate chains or drive belts while the machine is running.

Never remove crop from the machine while the machine is running.

Moving parts can pull you in faster than you can move away!

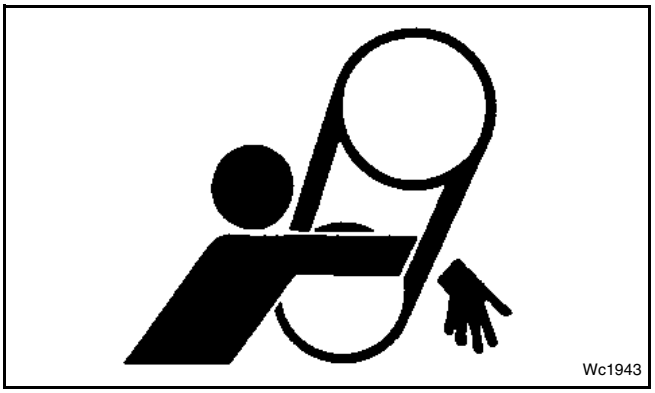

FIG. 31

ENGINE SAFETY

FIG. 32: Make sure that all shields, guards and access doors are in place and properly closed before starting the engine.

Start the engine from the operator's seat only. Be sure that the transmission is in neutral and the header, separator and unloader clutches are disengaged.

Be sure that all bystanders are clear of the machine before starting the engine.

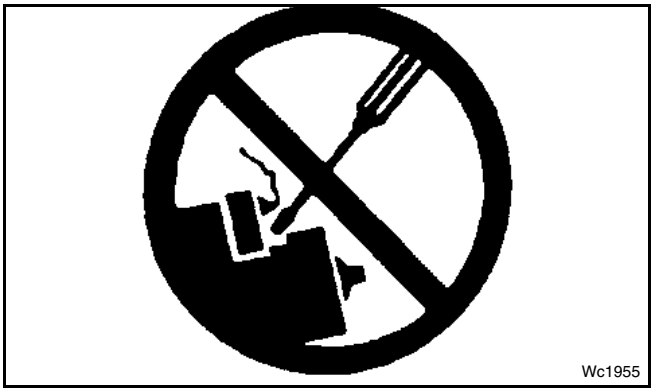

FIG. 32

FIG. 33: Engine is equipped with an electric starting aid. Do not use aerosol starting fluid! Use of this fluid can cause and explosion that can result in severe injury or death.

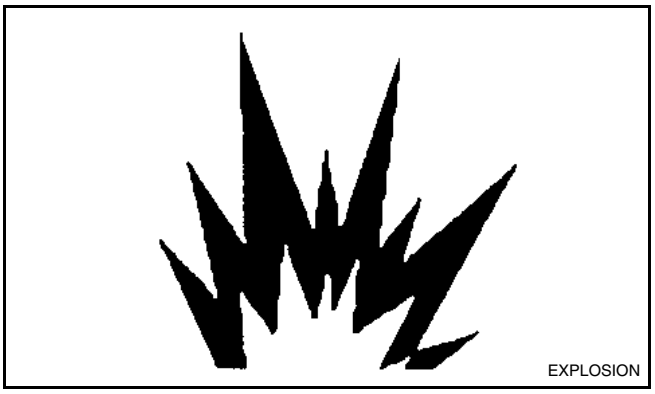

FIG. 33

TIRE SAFETY

FIG. 34: Tire explosion and or serious injury can result from over inflation. Do not exceed the tire inflation pressures.

Replace worn or damaged tires. When tire service is needed, have a qualified tire mechanic service the tire.

Do not weld on the rim when a tire is installed. Welding will cause an explosive air gas mixture that will ignite with high temperatures. This can happen to tires that are inflated or deflated. Removing the air or breaking the bead is not enough.

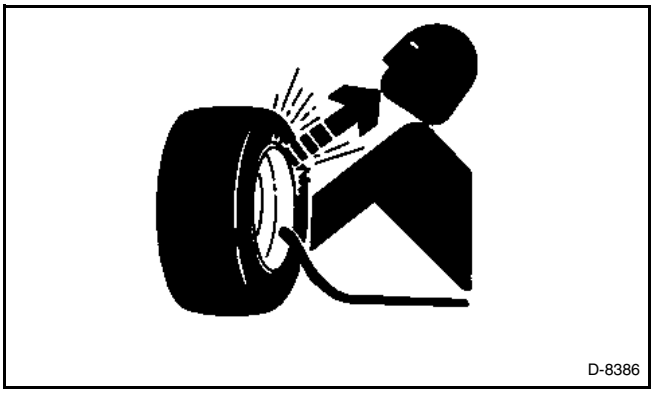

FIG. 34

BATTERY SAFETY

FIG. 35: Electrical storage batteries give off highly flammable hydrogen gas. Keep lighted smoking material and open flame or electrical sparks away from the battery. Do not lay tools or other conductive material on the battery.

Be careful when connecting booster cables to batteries. Electrical component damage or battery explosion can result if booster cables are not installed correctly.

Do not charge a frozen battery as the battery can explode. Warm battery to 16°C (60°F).

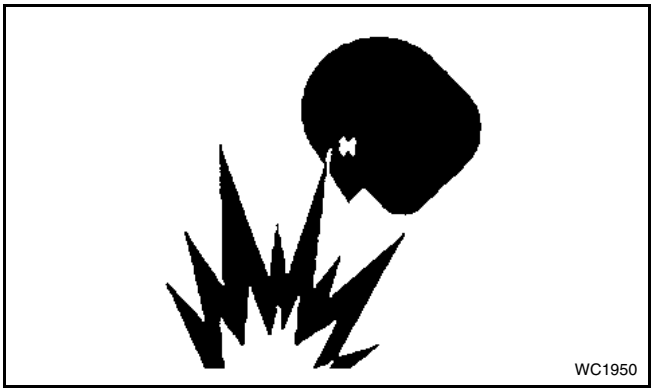

FIG. 35

FIG. 36: Fluid in electrical storage batteries contains sulfuric acid. Avoid all contact of fluid with eyes, skin or clothing. If contact does occur, flush off immediately with large amounts of water.

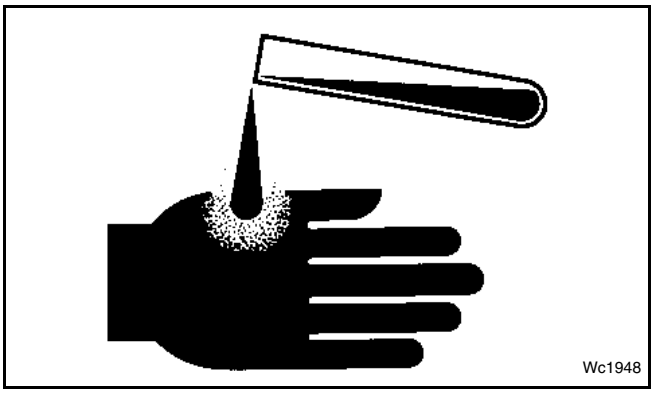

FIG. 36

ACCUMULATOR SAFETY

FIG. 37: The accumulator is charged with dry nitrogen gas. Use only dry nitrogen when charging the accumulator. Do not use air or oxygen or an explosion will occur.

Nitrogen gas when released can cause localized freezing. Be sure to wear protective gloves and glasses when handling nitrogen.

Do not drop the accumulator. A charged accumulator contains nitrogen under pressure. If the charging valve breaks away from the accumulator, the escaping nitrogen will propel the accumulator at a high rate of speed.

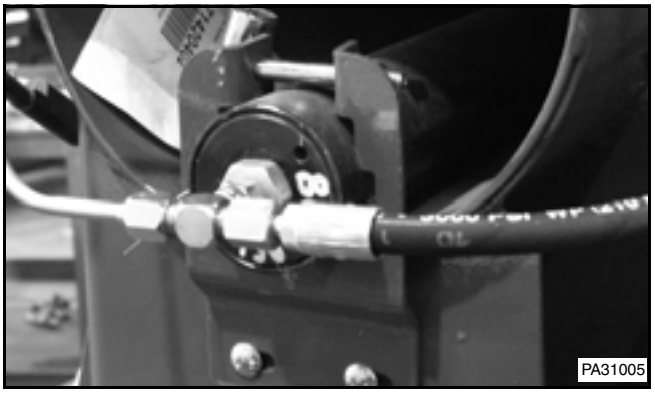

FIG. 37

CYLINDER STOPS

Reel Lift Cylinder Stops

A reel lift cylinder stop is supplied for the reel lift cylinder on both sides of the header. Install both reel lift cylinder stops to prevent lowering of the reel.

FIG. 38: Engaging Lift Cylinder Stops - Put the header on the ground and raise the reel to maximum height. Stop the engine, set the parking brake, and remove the start key.

Release the stop (1) from the carrying strap (2). Swing the stop forward until the retaining spring snaps around the rod of the cylinder.

Repeat this procedure for both sides of the header.

Start the engine and lower the reel lift cylinders until the stops are contacting the upper ends of the cylinder barrels.

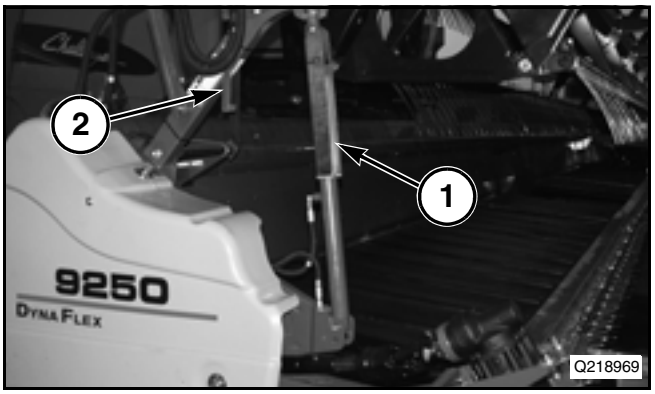

FIG. 38

FIG. 39: Disengaging Lift Cylinder Stops - Put the header on the ground and raise the reel to maximum height. Stop the engine, set the parking brake and remove the start key.

Return the stops (1) to the carrying straps (2).

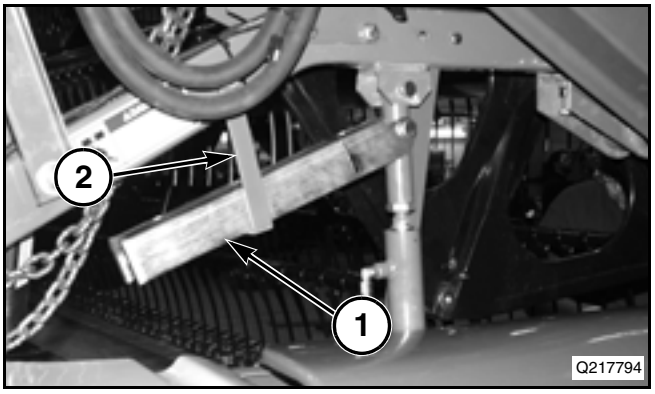

FIG. 39

Header Lift Cylinder Stop

FIG. 40: Disengaging Lift Cylinder Stop - A lift cylinder stop (1) is located on the left-hand header lift cylinder of the machine. The lift cylinder stop is shown in the disengaged position.

Raise the header to maximum height. Stop the engine, set the parking brake, and remove the start key. Raise the lift cylinder stop and engage the carrying strap (2) into the slot provided on the feeder housing.

DANGER: NEVER permit anyone to work under the header or the feeder housing or between the header and the machine UNLESS the header lift cylinder stop is fully engaged on the lift ram, the engine is stopped, the brake is set, the start key is removed, and the header is latched securely to the feeder housing.

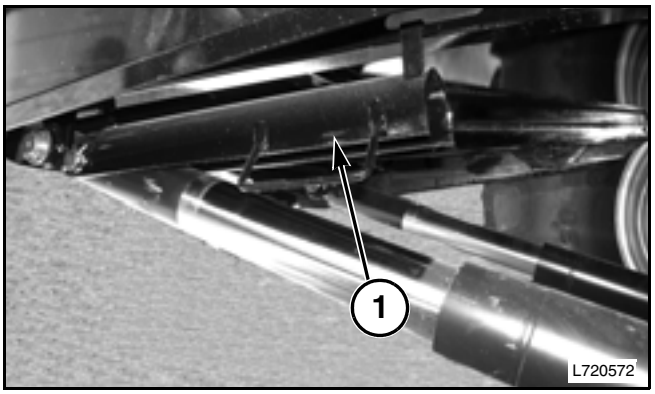

FIG. 40

FIG. 41: Engaging Lift Cylinder Stop - Raise the header to maximum height. Stop the engine, set the parking brake, and remove the start key.

Release the carrying strap (2) on the lift cylinder stop (1) from the slot provided on the feeder housing. Swing the stop downward until the lift cylinder stop surrounds the three sides of the cylinder.

Start the engine and lower the header until the stop is contacting the upper end of the cylinder barrel.

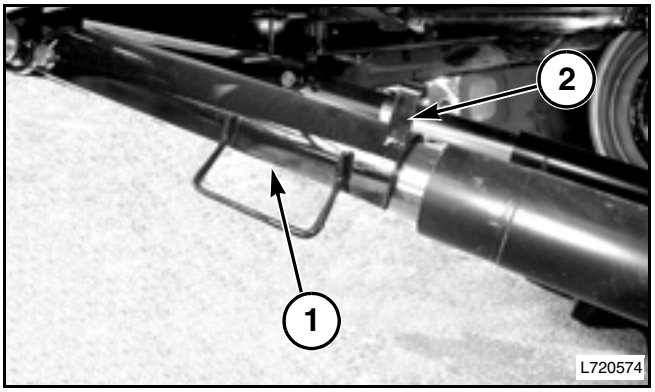

FIG. 41

SHIELDS

NOTE: Pictures in this manual may show shields removed for visibility or access to parts of the machine. Numerous shields must be opened and or removed to perform normal service and adjustment procedures.

WARNING: Never operate the machine or allow others to operate the machine unless all shields supplied with the machine and the machine's attachments are properly in place.

When using the header, always follow the following safety precautions:

CAUTION: Do not operate unless all shields are in place.

WARNING: Do not leave the operator's platform unless the brake is set, the engine is stopped, and the start key is removed.

DANGER: Never permit anyone to examine, clean, lubricate or adjust any part of the flex cutterbar, the header automatic lift, the reel or the header itself unless:

The header is lowered until the header is setting on the ground, the reel lift rams are either fully retracted or have the reel lift ram stops properly engaged over the ram rods of the right-hand and the left-hand reel lift rams, the engine is stopped, the brake is set and the key is removed from the start switch.

OR

The header is raised, the ram stop is fully engaged on the header lift ram, the reel lift arms are either fully retracted or have the reel lift ram stops properly engaged over the ram rods of the right-hand and the left-hand reel lift rams, the engine is stopped, the brake is set and the key is removed from the start switch.

DANGER: When operating in muddy conditions or where debris will possibly occur, the finger sensors may become jammed in the raised position and not permit the header to drop in automatic operation.

When this or any malfunction occurs, do not attempt to free or move the fingers unless the header lift cylinder stop in engaged as instructed on the danger decal for the lift cylinder stop. To do so can cause the header to drop suddenly and cause serious injury.

FIG. 42: The left-hand end shield (1) shown in the closed position.

The divider shield (2) shown in the operating position.

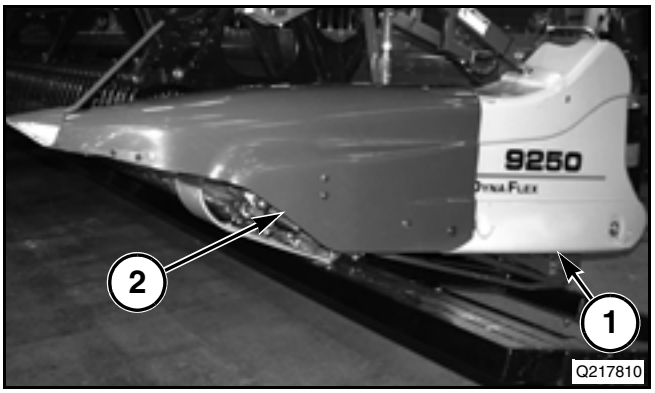

FIG. 42

FIG. 43: To remove the end shield (1), first remove the two cotter pins (2).

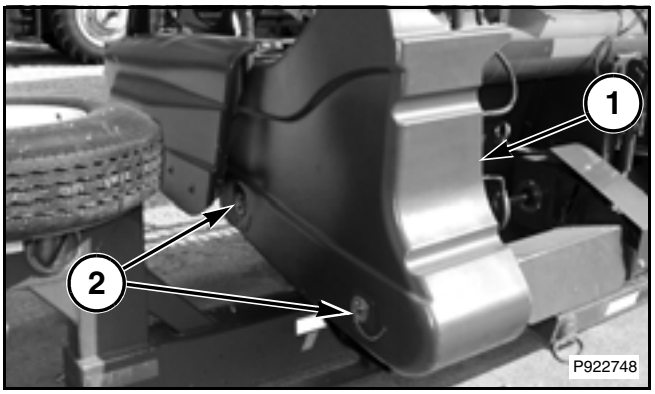

FIG. 43

FIG. 44: Remove the third cotter pin (2). Pull the end shield away from the two bottom pins and then lift the end shield from the upper pin.

To properly install the end shield, reverse the removal procedure.

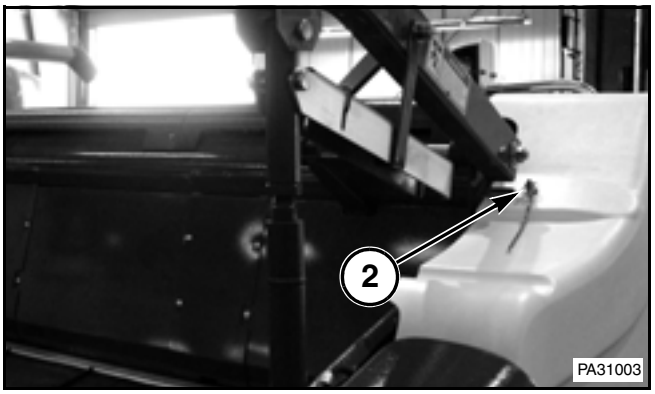

FIG. 44

FIG. 45: To release the divider shield (1), press the release tab (2) and pull down on the paddle (3) to release the latch (4). Pull the divider shield forward from the header.

The divider shield latch is located under the very front of the divider shield.

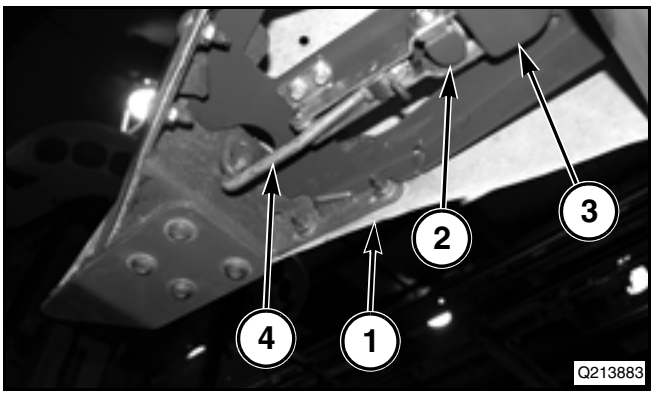

FIG. 45

FIG. 46: To install the divider shield, engage the mounting plate (1) onto the post (2).

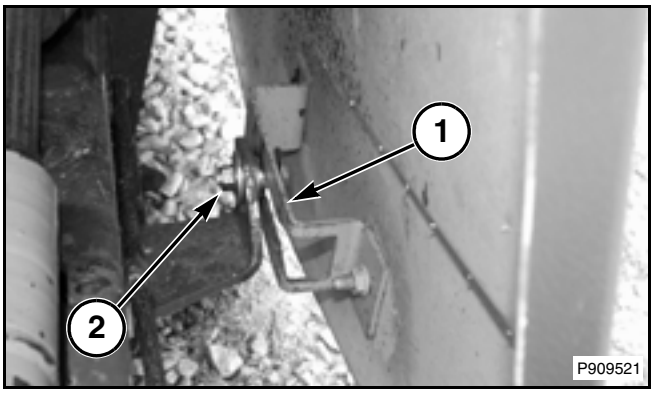

FIG. 46

FIG. 47: At the same time engage the rod support (3) into the receiver (4) on the header frame.

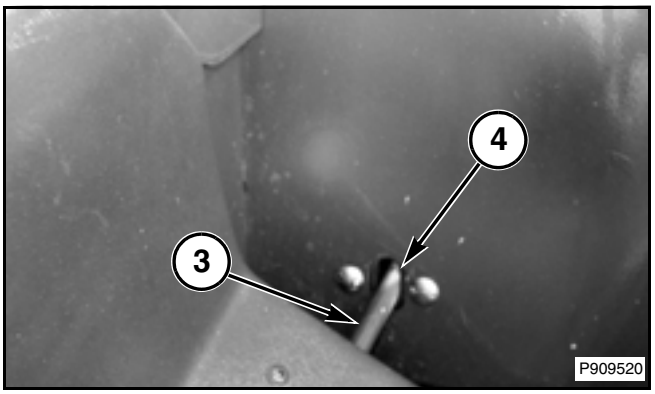

FIG. 47

FIG. 48: Insert the divider mount (1) into the divider bracket (2).

Engage the end of the latch rod (3) into the striker (4). Close the divider point latch (5) engaging the lock (6).

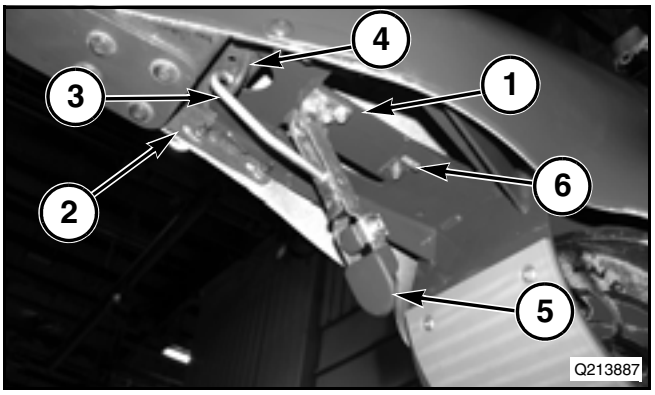

FIG. 48

FIG. 49: The reel drive shield (1) can be removed by removing the five mounting bolts and flange lock nuts and removing the shield from the inner reel shield.

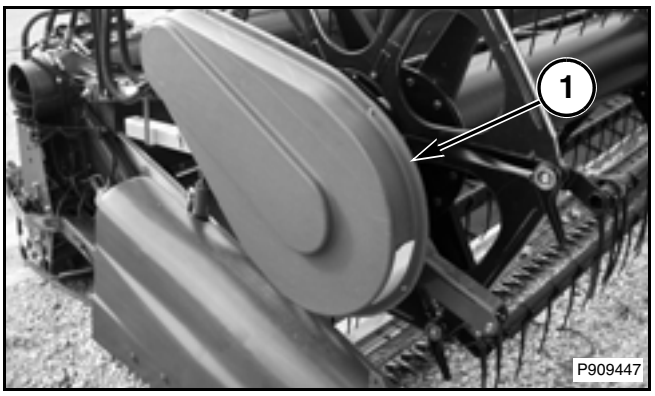

FIG. 49

FIG. 50: To release the four drive shields (1) along the back of the header, twist the latch handle (2) clockwise using a wrench or a suitable tool. Pull the top of the drive shield rearward and remove the drive shield by rotating the drive shield up and off of the posts on the header frame.

To install the drive shield, engage the bottom of the drive shield onto the posts in the header frame and rotate the latch on the drive shield into the striker (U-bolt) to secure the drive shield.

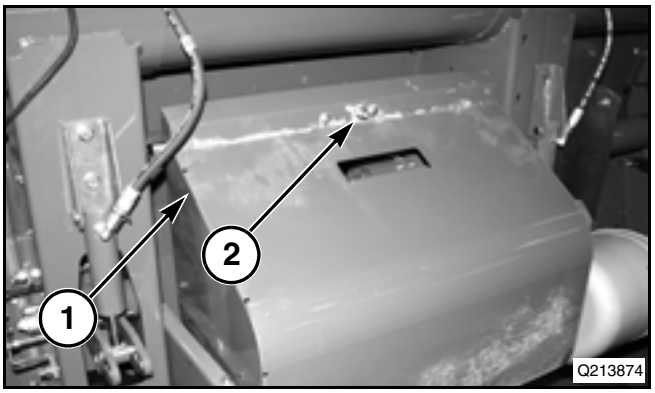

FIG. 50

FIG. 51: All implement drive lines (1) are shielded and equipped with a shield anti-rotation chain (2).

To remove, service, and install the shields, refer to the Drives division, Power Take Off Drive Shafts, Disassembly and Assembly write up.

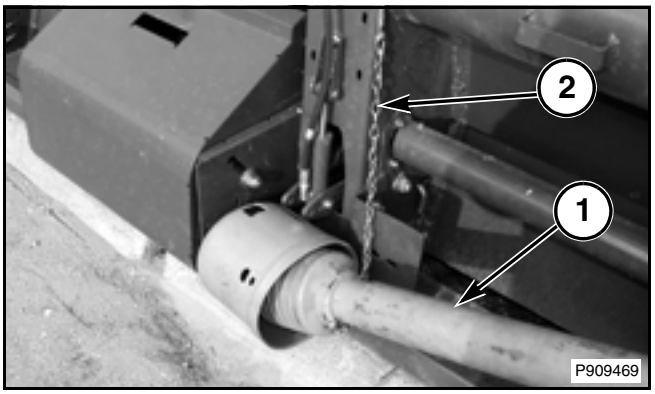

FIG. 51

FIG. 52: Each drive shaft is shielded with two fixed guards (1). The guards can be removed by removing the four flanged screws (2).

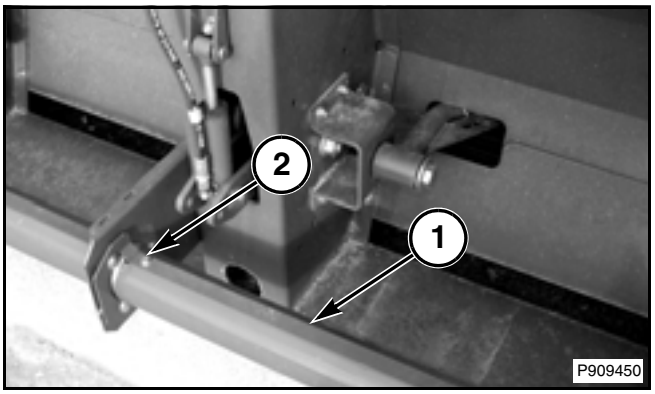

FIG. 52

FIG. 53: Shielding (1) along the top of the header frame to protect the hydraulic lines and the electrical harness can be removed by removing the flanged screws (2).

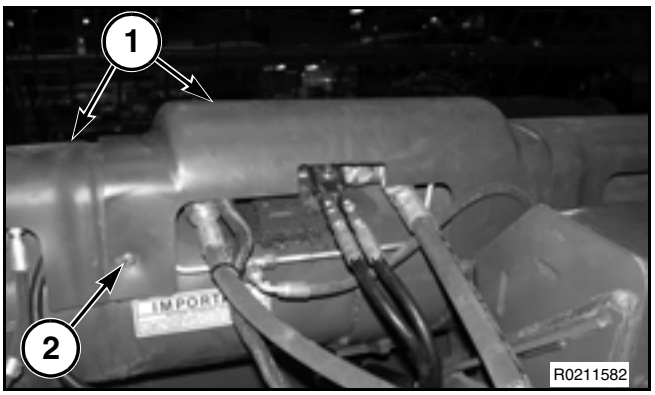

FIG. 53

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Gleaner®

9250
DynaFlex Draper Header

SERVICE MANUAL
79034308 B Rev.

02 - General Information

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GENERAL INFORMATION

INTRODUCTION

The information contained in this manual covers service information for the DynaFlex™ Header.

The header operator's manual as well as the machine operator's manual must be kept at hand for reference at all times.

Units of Measurement

Measurements are given in metric units followed by the equivalent in U.S. units. Hardware sizes are given in millimeters for metric hardware and inches for U.S. hardware.

Replacement Parts

To receive efficient service, always give the following information:

- Correct part description or part number.
- Model number of the machine.
- Serial number of the machine.

Machine Identification

FIG. 1: Each machine is identified by type and serial number on the serial number plate (1). The serial number plate on the header is located to the left of the combine interface.

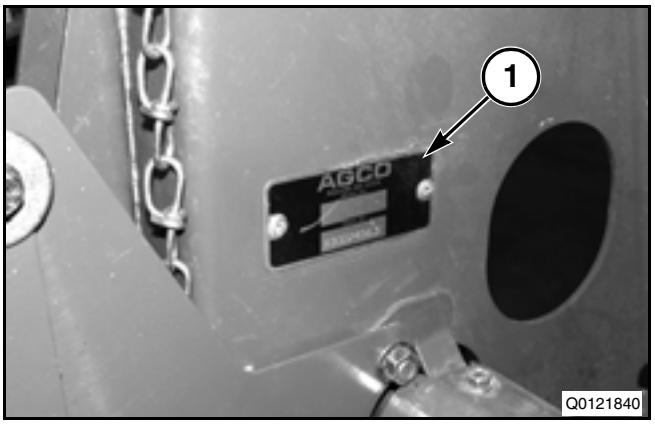

FIG. 1

Header/Machine Usage

General

All models are equipped with hydrostatic reel drive.

The header is equipped with a flexible cutterbar and Automatic Header Height Control (AHHC).

As a Flex Draper, the four or six sensors (potentiometers) installed on each end and throughout the center of the header are specifically designed to operate with the AHHC control module installed in the machine.

As a Rigid Draper, the tilt arms are locked up and drag rods with sensors are located at each end of the header.

The header is recommended for use in beans, peas, cereal grains, and low bearing crops and can be used with the cutterbar locked up or in the float position depending on the application.

OPERATION

Checklists

Daily

- Perform the service items due as given in the Lubrication Chart in the Lubrication and Maintenance section. Visually inspect all lubrication points to make sure lubrication is being received.
- Check for damage and excessive wear of parts. Make a general inspection of nuts, bolts, and other fasteners to make sure the fasteners are tight. See Bolt Torque Values in the Lubrication and Maintenance section for general bolt torques.
- Check all hydraulic lines and connections for leaks. See Maintenance in the Safety division for proper procedures to check for hydraulic leaks.
- Make sure the reel is level, the reel lift cylinders are in phase, and the tension of the reel drive chain is correct. See the Adjustments section.
- Check the condition of the drapers, the draper tension, and draper tracking. See the Adjustments section.
- Make sure all shields and guards are in position and the fasteners are tight. Replace any shields and guards that are missing or damaged.
- Make sure all safety signs are in the correct position and can be read. Replace any safety signs that are missing or damaged. See Safety Sign Location in the Safety division.
- Make sure all flashing amber warning lamps work correctly.
- Check the header to machine connections for security and operation of controls. See connecting the Header to the machine in this section.
- Make sure the correct operating adjustments have been made for your crop.
- Remove all crop debris from the machine and wipe off any oil or dirt at the end of the day.

Before Each Season

- Read the Safety section.
- Check to make sure the drapers are not stuck to the conveyor frame members. The draper must be free to rotate across the conveyor frame members before operation. If necessary, use pliers to carefully pull the draper away from the conveyor frame members.
- If any hydraulic components have been changed, the machine hydraulic system oil filter must be changed after no more than 50 hours of operation.
- So all items on the Daily Checklist.
- Set the tension of the drapers. See the Adjustments, section.
- With the machine operating in a stationary position, have another person watch the operation of moving parts. Watch for any signs of faulty operation, overheated bearings, and listen for any sounds that are not normal.

End of Season

- Replace any damaged or worn parts.
- Remove all crop debris from the machine. Crop debris will hold moisture and cause rust. Make sure to remove crop wrapped on a shaft and lodged against the bearings. Remove debris under draper belts.
- Wipe off any oil or dirt and wash the machine. Make sure to remove crop residue from the cutterbar.
- Store the machine in a dry sheltered place if possible. Lower the header onto suitable wooden blocks and release the header flotation.
- Release the draper tension. If the header is stored in an unsheltered area, remove the drapers and store in a cool dry area.
- Lubricate all grease fittings to force out any water or contaminate that is present. See Lubrication and Maintenance, Lubrication Details write-up.
- Brush a medium weight oil on the knife sections and the reel drive adjustment bolt.
- Paint any areas where paint has been damaged.

Variable Speed Drive Lockout

FIG. 2: Corn Header - The variable speed feature of this drive is used only with the corn header. The variable speed header drive can be very beneficial when harvesting corn by enabling the operator to match the corn header speed to the various field and operational conditions.

Grain Header - When operating the machine with a grain header, the variable speed header drive must be locked in the slowest position as shown to prevent over speeding of the header.

IMPORTANT: Over speeding will damage the grain header.

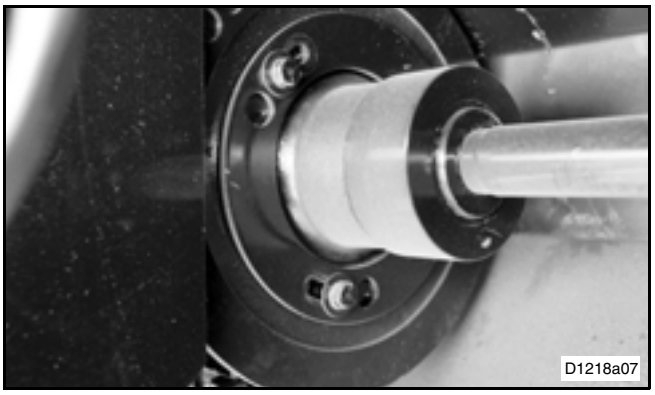

FIG. 2

FIG. 3: Lockout Position - When using a grain header, actuate the variable speed lockout by slowing the variable speed header drive to the slowest position.

The drive sheave on the pivot jackshaft must be out against the heads of the drive pins (1).

Loosen the three bolts (2) that fasten the lockout ring (3) to the sheave.

Rotate the ring clockwise as far as possible and tighten the bolts.

Be sure the lockout ring covers the heads of the drive pins, preventing inward movement of the sheave even if the speed change control switch in the operator's console is accidentally depressed.

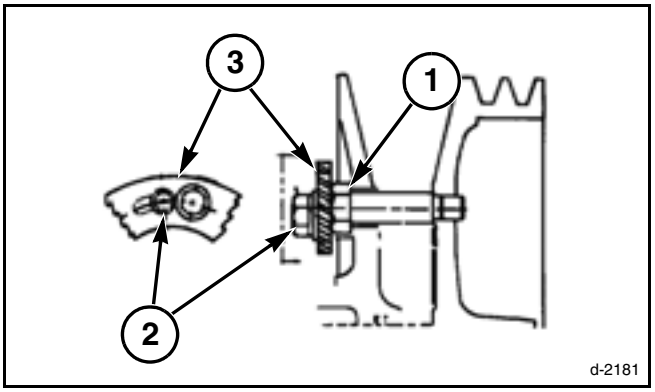

FIG. 3

Feeder Chain Speed

FIG. 4: The top feeder shaft (pivot) is belt driven from the bottom feeder shaft (countershaft).

Install the drive belt (1) on the small driven pivot sheave and on the large drive sheave (2).

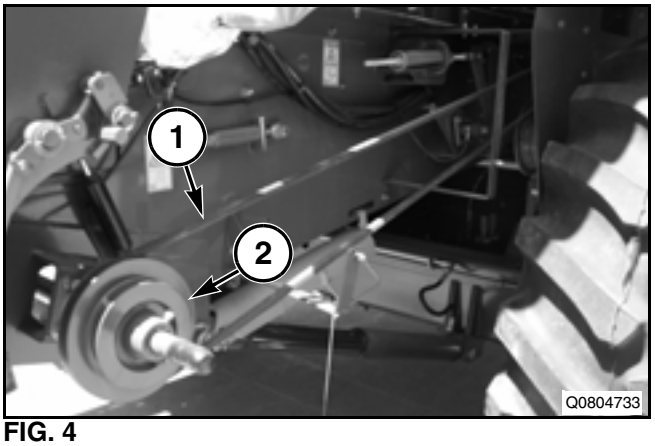

FIG. 4

Parking Stands

FIG. 5: The parking stands (1) are used to support the header when disconnecting the header from the machine. The stands hold the header in the correct position when removing and attaching the header to the machine.

Lower the header until the skid pads are contacting a level area on which to set the header. Remove the hairpin (2) and then the locking pin (3) from each parking stand. Lower the two parking stands to the level surface. Raise the parking stands to align the first set of locking holes available and install the locking pins. Secure the locking pin by inserting the hairpins.

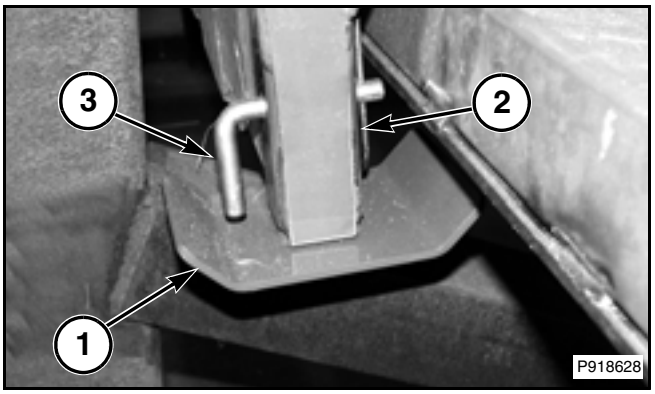

FIG. 5

Removing Header

FIG. 6: The parking stands (1) are used to support the header when disconnecting the header from the machine. The stands hold the header in the correct position when removing and attaching the header to the machine.

Lower the header until the skid pads are contacting a level area on which to set the header. Remove the hairpin and then the locking pin (2) from each parking stand. Lower the two parking stands to the level surface. Raise the parking stands to align the first set of locking holes available and install the locking pins. Secure the locking pins by inserting the hairpins.

Stop the engine, set the parking brake, and remove the start key.

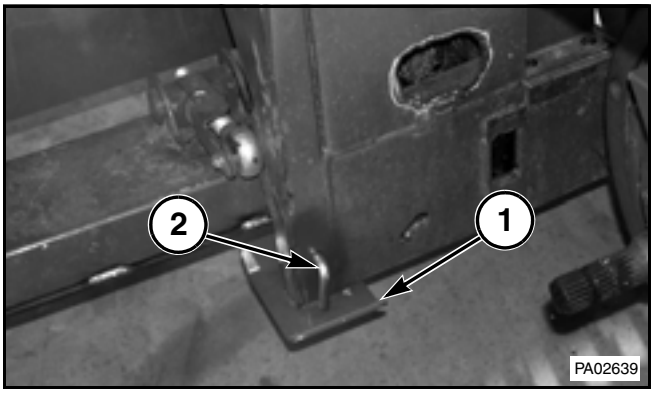

FIG. 6

FIG. 7: Slide the collar (1) to release the yoke on the driveline and then slide the driveline outward far enough to expose the end of the feed house drive shaft. Slide the yoke onto the driveline mount for storage. Repeat the procedure for the opposite driveline on dual Knife drive.

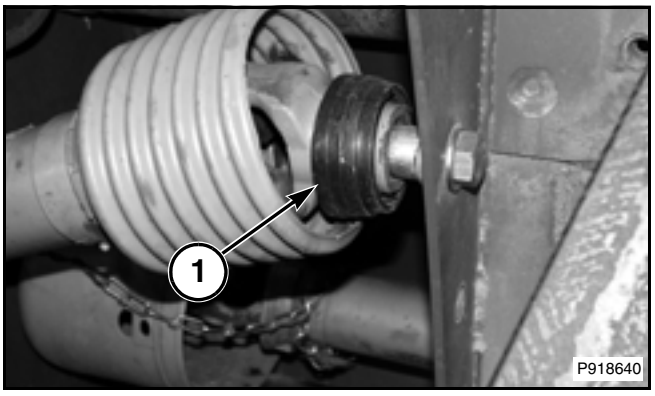

FIG. 7

FIG. 8: Disconnect the mobile single point connector (1) from the single point connector on the machine.

Put the connector into the couple storage bracket (2) when not in use.

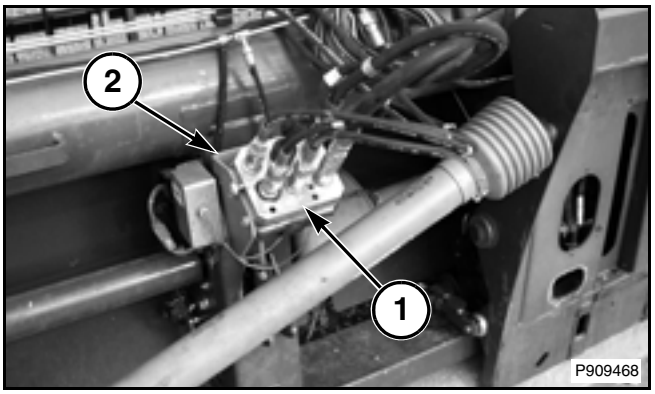

FIG. 8

FIG. 9: Transverse Machine - If a corn head is going to be attached to the machine, disconnect the reel lift quick coupler from the reel lift fitting (1). Connect the female quick coupler to the male coupler (2) for the header variable speed sheave. Install the dust cap (3) onto the reel lift fitting.

At the left-hand side of the pivot shaft move the lock out ring on the variable speed drive sheave to the unlocked position.

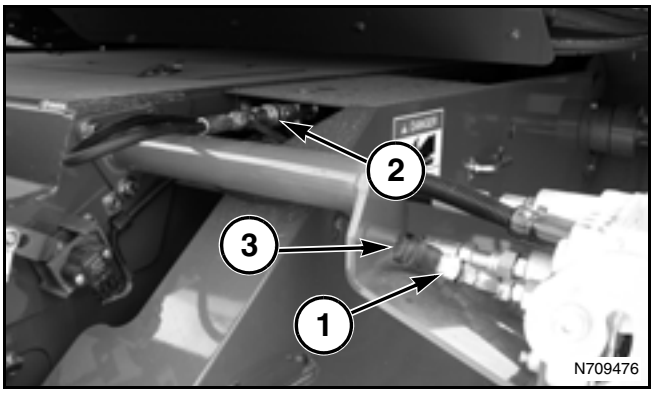

FIG. 9

FIG. 10: Axial Machine - If a corn head is going to be attached to the machine, disconnect the variable speed quick coupler from the hydraulic coupler (1). Connect the quick coupler (2) to the male coupler at the reel lift port in the main hydraulic valve. Install the dust cap (3) onto the hydraulic coupler.

At the right-hand side of the pivot shaft move the lock out ring on the variable speed drive sheave to the unlocked position.

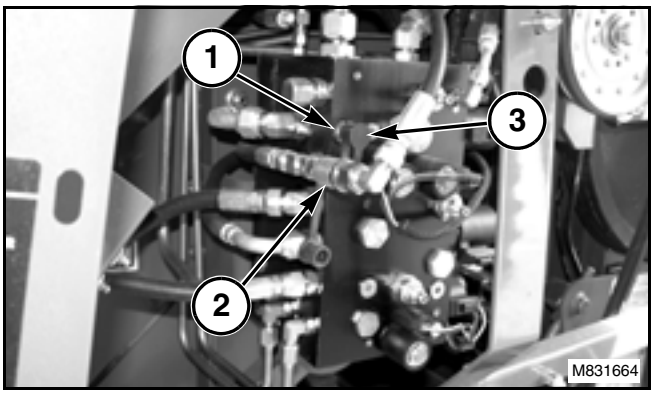

FIG. 10

FIG. 11: Install the socket of the tool over the hex stub (1) of the feed house latch linkage. Move the concave door tool rearward to unlock the feed house hooks from the header.

Start the engine and lower the header until the header disengages from the truss cradle on top of the feeder housing. Back the machine away from the header.

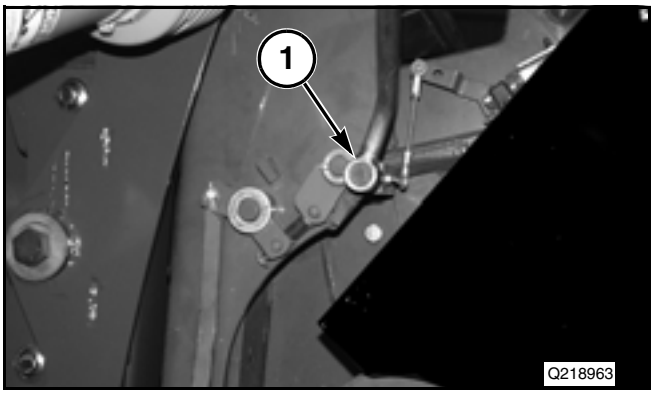

FIG. 11

Attaching Header

FIG. 12: Rotate the feeder housing latches (1) back into the feeder housing. Lower the feeder housing.

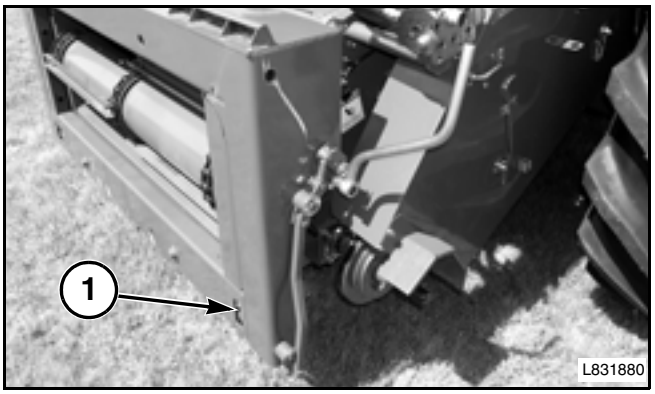

FIG. 12

FIG. 13: Align the left-hand front corner of the feeder housing with the left-hand guide flange (1) in the header opening. Drive the machine squarely into the header.

Raise the feeder housing, picking up the header and letting the lower pins enter the holes in the header back. Raise the header to full height and engage the header lift cylinder stop.

WARNING: Always follow this procedure to engage the header lift cylinder stop:

Raise the header to maximum height. Stop the engine, set the brake and remove the start key.

Position the cylinder stop over the lift cylinder rod. Start the engine and lower the header until the cylinder stop engages the front end of the lift cylinder barrel.

With the header lift cylinder stop engaged, again stop the engine, make sure the brake is set and remove the start key.

FIG. 13

FIG. 14: Install the tool (1) onto the latch crank and rotate the upper latch assembly counterclockwise to lock the hooks into the header. Make certain the latch is rotated over center to lock the hooks.

If the hooks do not latch, check that the lower pins are seated in the header back. If the lower pins are not seated, put a block under the left-hand end of the header and lower the header to reset the pins. Latch the hooks.

Remove the hairpins from the lockpins (2) holding the parking stands (3). Raise the parking stands all the way up into the header interface. Install the lock pins through the holes in the header interface and the parking stands.

Raise and lower the header against the ground multiple times before raising the header to full height and engaging the header lift cylinder stop. This lets the header completely settle in the feeder housing before aligning and connecting the header driveline.

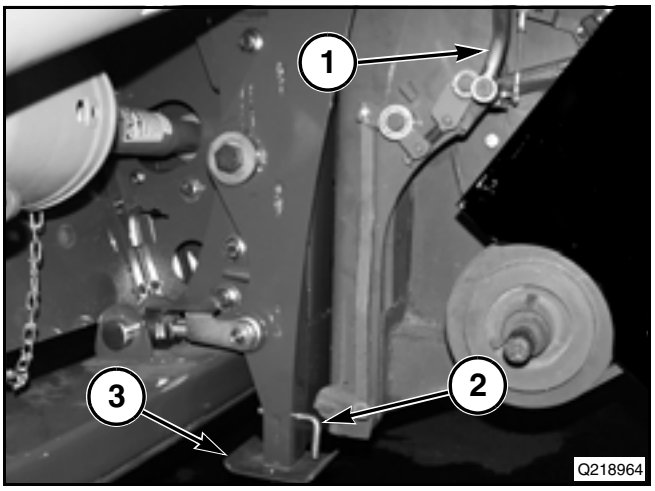

FIG. 14

FIG. 15: Slide the collar (1) to release the yoke and then slide the yoke from the driveline mount for storage. Repeat the procedure for the opposite driveline on dual knife drive.

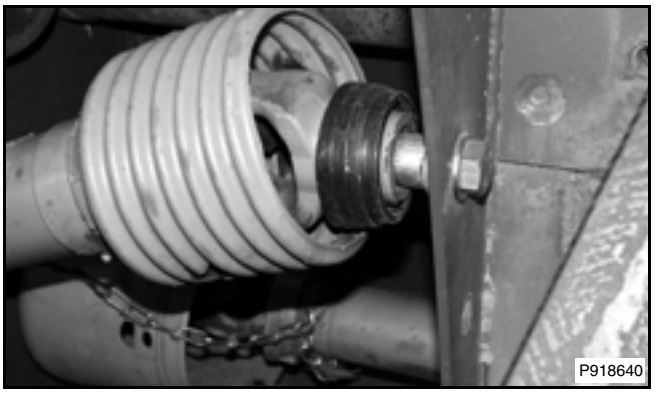

FIG. 15

FIG. 16: Sickle Drive Timing (Dual Knife Drive) - The two sickles must be timed to run exactly opposite each other before connecting the drivelines to the countershaft of the feeder housing. Both sickles must reach the end of the stroke at the same time.

Rotate the left and the right drivelines (indicator wheels) so that the same letter is showing in the indicator windows (1) on the PTO bells.

IMPORTANT: If the sickle drives are out of time, excessive sickle drive noise and unusual header vibration will be experienced.

To set the Sickle Drive Timing of the main drive group, refer to the procedure found in the Adjustments section, Sickle Timing write-up.

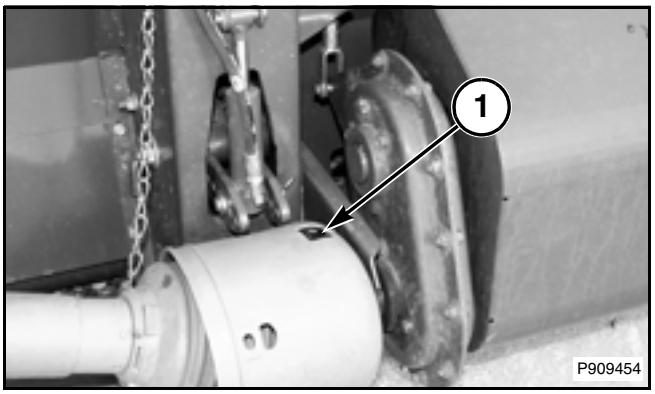

FIG. 16

FIG. 17: Slide the locking ring (3) back onto the yoke (2) at the end of the driveline (1).

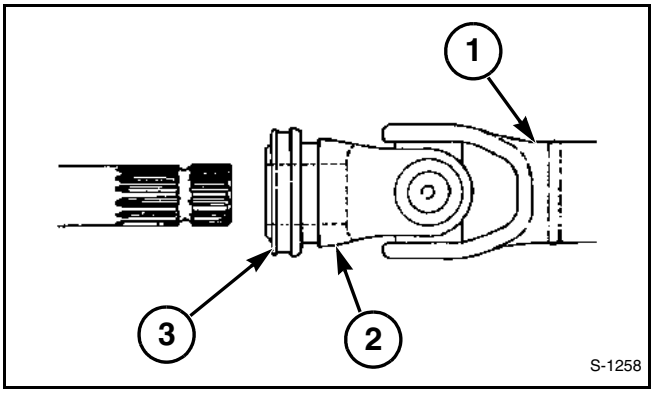

FIG. 17

FIG. 18: Install the driveline (1) onto the end of the countershaft in the feeder house.

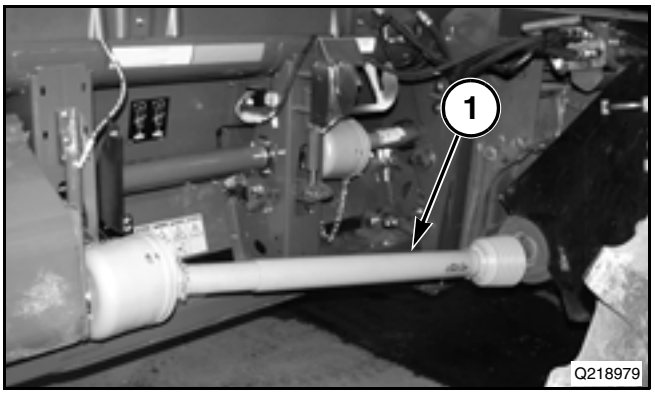

FIG. 18

FIG. 19: Release the locking ring and pull back and forth on the driveline to make sure that the coupling is locked in the annular groove (1) on the countershaft.

Repeat the procedure for the opposite driveline on dual knife drive.

IMPORTANT: Be sure that the same letter is showing in the indicator windows on the PTO bells after the installation of the left and the right drivelines.

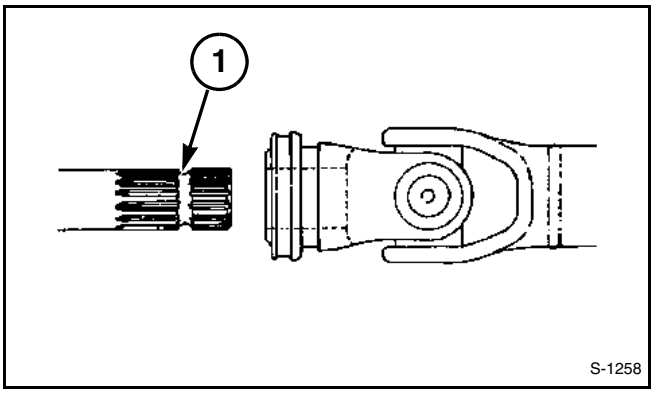

FIG. 19

FIG. 20: Transverse Machine - If a corn head has been attached, install the reel lift hose (1) onto the reel lift fitting (2) on the single point connector. Make sure the dust cap (3) is installed on the variable speed fitting.

Move the lockout ring on the variable speed drive sheave, on the left-hand side of the pivot shafts to the locked position.

IMPORTANT: When running the grain head, the variable speed header drive must be locked in the slowest position. Over speeding will damage the grain header.

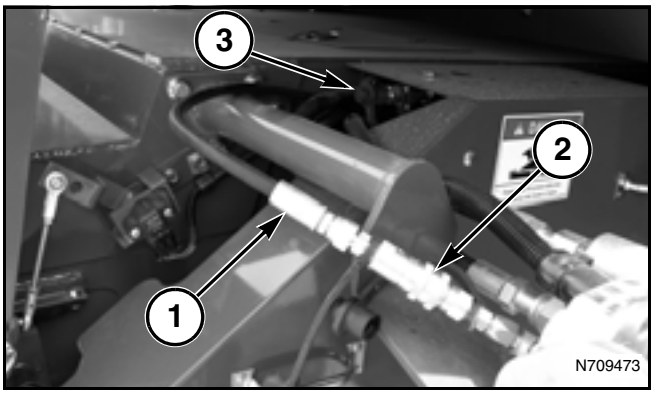

FIG. 20

FIG. 21: Axial Machine - If a corn head has been attached, install the variable speed hose (1) onto the male coupling fitting (2) in the main hydraulic control valve. Make sure the dust cap (3) is installed on the variable speed fitting (4) at the reel lift port.

Move the lockout ring on the variable speed drive sheave, on the right-hand side of the pivot shaft, to the locked position.

IMPORTANT: When running the grain head, the variable speed header drive must be locked in the slowest position. Over speeding will damage the grain header.

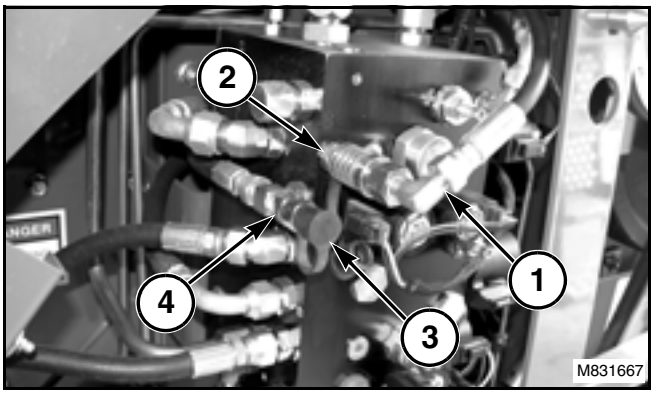

FIG. 21

FIG. 22: Connect the mobile single point connector (1) to the single point connector on the machine. Align the connectors and close the over-center latch locking the connectors together.

NOTE: To install the header on a machine without a single point connector, and adapter is needed.

Refer to the appropriate sections to set the proper cutter bar tilt for the drive tires used on the machine, level of the header, set the auger flighting clearance, draper pressure, and reel lift cylinder phasing.

WARNING: DO NOT operate the machine unless ALL shields are installed.

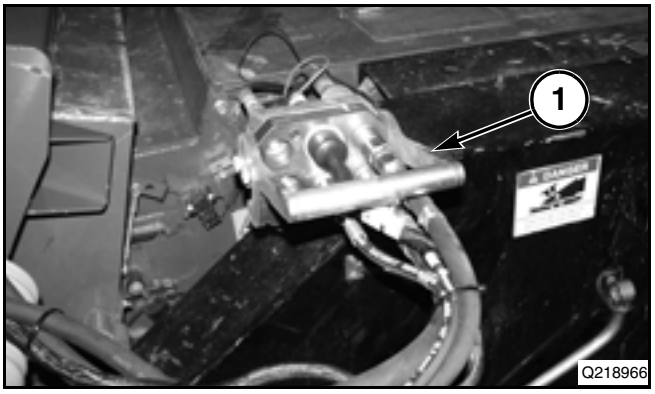

FIG. 22

Extremity Lights (Header)

FIG. 23: Header extremity lights (1) are factory installed on the right-hand and left-hand end of the header. The extremity lights are used to mark the ends of the header.

When harvesting, rotate the mounting tube (2) for the extremity lights inward.

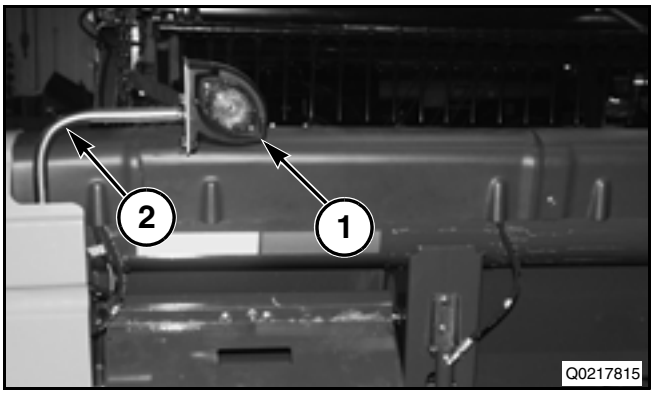

FIG. 23

FIG. 24: When transporting with the header installed on the machine, pivot the extremity lights (1) to the outside.

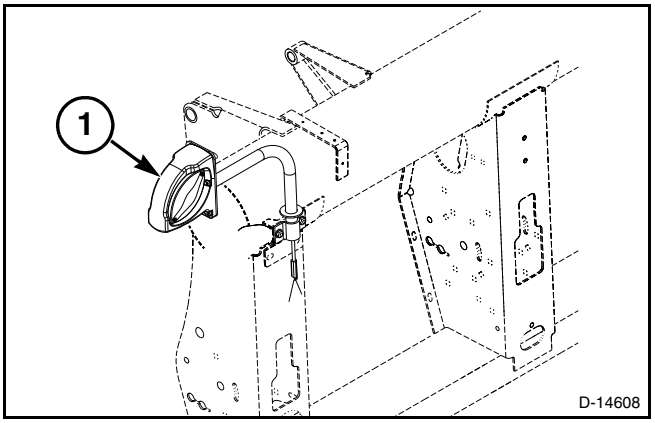

FIG. 24

Header Break-In

Check the reel drive chain for alignment and correct tension.

Lubricate the sickle with oil to aid initial break-in. If operating in extremely sandy or abrasive soil do not lubricate the sickle.

Watch for any signs, such as heating or noise, indicating faulty adjustment.

Draper Care

The drapers that are supplied with the header are made of a waterproof material designed for a long life with minimum maintenance.

Maintain proper draper tension while the header is operating. Release the draper tension at the end of each day or when the header will not to be used for an extended period of time.

Frequently check the drapers for abnormal wear and correct the cause immediately.

Keep the drapers as clean and dry as possible. Store in a cool, dry place away from rodents.

Oil spilled on drapers will cause rapid deterioration. Wipe off oil as soon as possible.

Unplugging the Header

If the header and the interface weldment jams or plugs:

NOTE: Refer to the Troubleshooing section to resolve specific functional problems.

1. Use the combine's header reverse to unplug the header and interface weldment. See the combine operator's manual to reverse the header. If reversing the header direction does not unplug the header, do the next step.
2. Stop the machine.
3. Disengage the header.
4. Lower the header and the reel.
5. Stop the engine and take the start key with you.
6. Clean the cutterbar and check for broken sickle sections and guards.
7. Clean the auger.
8. Resume operation when the cutterbar and the auger are operational.

WARNING: Do not attempt to manually unplug the machine with the header engaged and the engine running.